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AUTHOR Kull, Judith A.; And Others
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ABSTRACT

This paper describes the collaborative process and outcomes from involving teacher educators and school personnel in school-based collaborative supervisory teams formed by clustering graduate-level preservice teaching interns in a number of elementary and secondary field sites. The school-university collaborative reflects key elements in the collaborative process: nonhierarchical self-management, collegiality and experimentation, a setting of pause, reflective thinking, and cognitive expansion. Teams comprised of university supervisors, cooperating teachers, interns, and one principal from each of 10 cluster sites engaged in an inquiry-oriented collaboration in order to articulate a model of collaborative supervision surrounding issues pertinent to 3 areas: (1) the process of matching interns and cooperating teachers; (2) achieving maximum communication among interns, cooperating teachers, administrators, and supervisors; and (3) defining the role of interns, cooperating teachers, school administrators, and university supervisors. Results suggest that collaborative action research leads to enhanced professionalism and changes in practice both at the university and the school level in the context of national reform efforts. (Contains 13 references.) (LL)

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Models of Collaborative Supervision: Involving Teacher Educators and School Personnel in New Roles and Activities via Collaborative Supervisory Teams

Judith A. Kull
Associate Professor
University of New Hampshire

Sharon Nodie Oja
Associate Professor
University of New Hampshire

Nancy E. Ellis
Assistant Professor
University of New Hampshire

Mailing address:

Dr. Sharon Nodie Oja
Department of Education
Morrill Hall
University of New Hampshire
Durham, NH 03824-3595

Telephone: (603) 862-2379
FAX: (603) 862-2174

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INTRODUCTION

The purpose of this paper is to describe the collaborative process and outcomes derived from involving teacher educators and school personnel in school-based collaborative supervisory teams who work with graduate-level pre-service teaching interns in a number of elementary and secondary field sites. Field components of the University's Teacher Education Program are described briefly. The current study is framed by the work of Oja et al (1987;1988;1989) and Clift et al (1989) concerning the collaborative action research process. The study focuses on the process of inquiry-oriented collaboration resulting in current and ideal or "utopian" practices at particular field sites in New Hampshire where five or more graduate students are clustered to carry out their teaching internships. These field sites are referred to as "cluster sites." Practice descriptions of the cluster sites are evolved by the participants themselves: Interns, Cooperating Teachers, Administrators, and University Supervisors. The following thesis is explored within the context of the University of New Hampshire's experience: Collaborative Action Research as described by Oja, Clift and others and made explicit in the work of the UNH collaborative team, leads to enhanced professionalism and change in practice both at the university level and at the school level.

THE UNIVERSITY OF NEW HAMPSHIRE'S TEACHER EDUCATION PROGRAM

The University's Teacher Education Program has had a long history of connection with elementary, middle, and secondary schools throughout New Hampshire and southern Maine. Students in the program have two primary field experiences. In the first, they explore teaching as teacher aides for one semester, normally as undergraduates. In the second, they work with children as graduate-level interns, in a supervised school setting, for a full year. The first experience serves a gatekeeping function. Students and supervisors thoroughly assess a candidate's suitability for teaching. Those who go on may complete some of their professional coursework as upper division students while majoring in a subject-matter area. They must then be admitted to the graduate school before enrolling in the internship and completing final coursework and thesis requirements for the Master's degree (Andrew, 1989). During its fifteen year existence, the Five-year Teacher Preparation Program has undergone much poking, prodding, and refinement as a result of regular evaluation. Emphasis has been on preparing teacher leaders who are well-grounded in the structures of their disciplines, professionally alert to a variety of critical philosophical, developmental and practical perspectives, and whose sensitivity to children guides them in carrying out the day-to-day decisions of a teacher (Oja, et al.,1991).

Programmatic refinement has led to increasingly collaborative arrangements with schools around shared goals of teacher development. Results of recent activity include refinement of structures for facilitating the intern's movement into the professional arena, an increase in the number of cluster sites, and a formalization of the collaborative structure.

BACKGROUND OF THE STUDY

Crucial characteristics of successful collaborative action research described by Oja and Smulyan (1989) provide the basis for the process of collaboration as it currently exists at UNH: a focus on teacher involvement in defining and solving problems; an emphasis on collaboration between school teachers and university professors; a problem-solving approach encouraging explication of and reflection on practice. Collaboration of school and university educators recognizes and utilizes the unique skills and insights provided by each participant. A "work with" rather than a "work on" posture is assumed. Consensus in decision-making and a "safe forum" encourage each participant to voice his or her perspective and attempt to understand and take the perspective of others. Collaborative Action Research is a form of professional development for both school and university participants. All are asked to take on new roles and provide the support to do so. Research discussions

center on real life problems. There is a moral-ethical dimension which challenges all participants to think in more encompassing ways. There is an expectation that the outcome of collaboration will be to change current practice. The collaborative action research team and its work become a temporary system which provides key facilitative conditions for personal and professional development of team members. In the current study, such a temporary system of school and university personnel came into being. The process of working together encompasses the characteristics of collaborative action research described above.

Tomorrow's Schools (Executive Summary,1990), provides a formidable series of challenges which guides our work. This report of the Holmes Group makes some positive assumptions about the nature of teachers, children, administrators, and university professors, then exhorts us to proactively "invent," "grapple," "ponder," "devise," "organize," collaboratively, ways of upgrading and democratizing the education of children and teachers. Many have noted that such exhortations imply the re-orienting of cooperating teachers and university faculty toward collaborative work (Clift, Johnson & Holland, 1989; Cruickshank & Cruz, 1989; Johnson, 1990). Clift et al. elaborate:

> Many of the calls for reform and much of the reform legislation imply that someone from outside must "fix" education. Teacher educators who are concerned with schools do not need to project solutions onto those who should be allies. Developing collaboration through action research and creating structures to share knowledge can be one vehicle for increasing communication among all parties concerned with students' emotional and intellectual growth.
> (Clift et al.,1989, p. 61)

Through collaborative action research within the context of the five-year UNH Teacher Preparation Program, we have achieved a re-orientation of cooperating teachers and university faculty who are involved in supervising interns. The current study focuses on descriptions of the work of these collaborators, the process by which the group carries out its work, the outcomes of that work, and the structure or temporary system which sustains it.

SCHOOL-UNIVERSITY COLLABORATIVE

Origins of the School/University Collaborative are in discussions among teachers and principals from four cluster-site schools who met in two groups, each with a university supervisor. The groups met regularly during a "training year" in which they studied supervisory practice and issues of adult development. A task force was then organized to look at common elements associated with the placement of interns in the four schools. For several years the groups worked collaboratively among

themselves, refining local practices. University involvelment was limited to two faculty members, and the group did not have a formal connection the the Teacher Education Program.

The current School-University Collaborative is comprised of 27 members representating ten schools and the university. Included are cooperating teachers, principals, university supervisors (full-time faculty), the Director of Field Experiences, and interns. The group meets bimonthly. With input from the whole group, the agenda is set by a representative steering committee. The system includes a process, rooted in collaborative action research, which is integral to the group's work: development of overall shared goals; translation of goals into tasks; organization of working groups to accomplish the tasks; ongoing input from and discussion with the rest of the collaborative. The process is directed by the steering committee. Shared goals of the School/University Collaborative are threefold (1) to raise issues of common interest and resolve concerns; (2) to describe existing cluster-site practices to new members or to those who are interested in developing a cluster site; and (3) to develop a "best model" or models for collaborative supervision and/or other professional study in a cluster site. One principal describes the overall goal of the group as "an opportunity to move from the original focus on supervision of interns to a more comprehensive, everyday

connection between the university and the schools on a variety of mutual interests."

Recent work undertaken by the collaborative is explicated in the following paragraphs. Descriptions highlight working examples. Data sources include interviews and writings of participant observers, documentation of discussions, agendas, and summaries which describe the process and outcomes.

PROCESS OF COLLABORATION

After reaffirming the three-fold mission described above, four working groups were formed within the School/University Collaborative to brainstorm lists of questions to be used in identifying problems to be addressed by the collaborative as a whole. The questions fell into two categories: policy issues and practice issues. The practice issues were further divided into "general" (e.g. "If we had the best model possible for supervising interns, what would it look like?") and specific (e.g. the importance of having the intern in the school building during the spring prior to internship so that she/he could gain a sense of the school's culture). Policy issues concerned intern compensation (no central policy; a school by school decision); beginning teacher step (The state considers internship to be a year of teaching, thus most begin their first regular teaching position at the second step.); pre-field course work (varies, the

university does not prescribe a sequence); evaluation of interns and cooperating teachers (An assessment/goal setting instrument for interns is in general use; a similar instrument exists for supervisors but is not in general use.); training for cooperating teachers (The university offers a tuition-free supervision course for cooperating teachers.). There were also a number of thoughtful questions about how teachers structure their time relative to supervision, collaboration, and professional education. Other questions focused on relationships among all constituents relative to support and guidance.

Based on an analysis of the original set of questions, a series of overarching questions was developed to serve as a guide for designing a "Utopian Model of Collaborative Intern Supervision." "Let your untamed ambitions and your wildest dreams have free rein as you design your Utopian Model. Reality will creep in soon enough." The questions were as follows: (1) What is a successful process (or model) for matching the Intern and the Cooperating Teacher? (2) In what way can we achieve maximum communication among the Interns, Cooperating Teachers, Administrators, and Supervisor? (3) What are the roles and who should perform them? Each question contains a set of related questions reflecting a focused approach to the tasks at hand. They frame the elements of the utopian models developed by the various cluster sites.

The resulting "Utopian Models of Supervision" are 10 separate documents developed by each of ten collaborative sites using the framing questions described above as guides. Inspection and discussion of the ten models reveals that elements/expectations in each category are similar, but levels of current and projected practice vary as do recommended structures for meeting expectations. Rather than describe each "Utopian Model," we discuss recommendations/practices addressed by the School/University Collaborative under each of the three guiding categories, noting where there is not consensus. Some of the recommendations contain an inherent tension between entrenched practices or philosophies held by the schools on the one hand, and by the university on the other. Also, while there is much agreement on general practices, how some of those practices are played out varies from one school to the next and within the university -- a factor requiring sensitivity on the of all collaborators. A general discussion in framed by the original questions in each of the three categories addressed by the School/University Collaborative. Described are current outcomes based on these discussions and embedded in the utopian models. Some outcomes are recommendations for practice not yet in place. Some are current practices at a few sites which are recommended to the others. Some are current refinements of previous practice.

Category One: What is the process of matching interns and cooperating teachers?

A. What information does the school need to communicate to interns and what are good ways of communicating this?

There is general agreement that the schools must communicate to interns their philosophy, climate, curriculum, special features/programs (e.g. emphasis on the reading/writing process), setting and its benefits (e.g. small rural, large urban), expectations of interns, cooperating teachers and university supervisors. One of the high schools recommends constructing an orientation package available to the university so that prospective interns can read through or view it at their leisure and make an early decision about which schools to visit. Such a package might include a videotape of classroom practice and interviews with teachers and students regarding their "sense of the school." All recommend a two-hour to full-day site visit by prospective interns, but the ten sites disagree on when such visits would take place (e.g. at the time of the school's general informational meeting in the winter or spring prior to internship or by return invitation).

B. What is the University's role?

The prospective intern should be encouraged by the university to visit the school(s) of interest two or more times, talking extensively with

the principal, department chair if applicable, and several prospective cooperating teachers. If possible, the prospective intern should work with children during one of the visits, preferably in a cooperative setting with the teacher. This is already an effective practice in the original cluster sites. Early spring "matching" decisions allow ample contact between intern and cooperating teacher over the remaining spring and summer to prepare for school in the fall. In order to facilitate the matching process, during the spring visitation time, prospective interns provide schools with resumes while interested cooperating teachers provide the university with descriptions of their teaching and supervisory styles. Recently put into practice, this exchange of information by prospective interns and cooperating teachers provides a significant opportunity to advance professional dialogue between the two groups at an early stage. The university facilitates the practices described while recognizing that specific procedures vary from one site to the next. (e.g. The initial contact at one school might be the Department Chair, at another school, the principal; return visits might be at the school's request at one site and by the intern's request at another). Sensitivity on the part of the university to local school norms and cultures is a key factor in effecting a good relationship. Explication of local norms during meetings of the School/University Collaborative has been crucial to developing such

sensitivity. Taking these issues and practices into account, the university acts as a "clearinghouse," facilitating the matching process but relying heavily on the choices made by prospective interns and prospective cooperating teachers.

Other recommendations for the university's role have been made by the 10 cluster-site schools: The university should provide to the school a videotape describing its program and the expectations of interns, cooperating teachers, and university supervisors. The university currently has published an Intern Handbook available to all schools and has developed a brochure describing the internship placement process and timeline. Two original sites recommend the development of a "matching" instrument for interns and cooperating teachers based on theories of adult development and learning/teaching styles.

One of the experienced cluster sites recommends that coursework prior to Internship emphasize the following: observation, questioning, making connections between theory and practice, reflection, interviewing, classroom management, and grounding in child and adult development. These elements, they believe, would help the prospective intern to understand the school settings prior to internship and help in the matching process. Such emphases are already embedded in current pre-service coursework, but such knowledge is often first and most visibly put to the

"practice test" during the Internship. There is a potential clash between university and school philosophies here. Many school personnel expect students to enter the internship with a firm grasp of theory-based methods, a well-articulated philosophy of education, and a clear approach to classroom management. The university feels that the student develops this "grasp" and constructs his/her own sense of "best teacher" through both coursework and informed reflection on field experience, but in no prescribed order. The order varies from one student to the next and depends upon a wide range of developmental characteristics. The Teacher Education Program is flexible enough to allow for several points of entry and "exit," thus accommodating both traditional and non-traditional students (Oja et al., 1991).

Category Two: In what way can we achieve maximum communication/support among the Interns, Cooperating Teachers, Administrators, and Supervisor?

The schools prefer that the supervisor work exclusively with one or two schools, thus ensuring stability in communication while stimulating growth over time. Because of the labor intensity of the position and fiscal constraints, the university relies heavily on adjunct supervisors (about half are adjuncts and half are full-time faculty). It is impossible to assure single-supervisor continuity for all cluster-site schools from

year to year. In fact, from the university's perspective, it would be advantageous to ask an experienced cluster-site supervisor to serve as the initiator and supervisor of a newly forming cluster site. Compromises including the pairing of new supervisors with experienced ones in a "sharing" of sites and interns are being tried. Also, the longstanding Supervisors' Group or "Supe Group" meets bi-weekly to help new supervisors understand school and university expectations and modes of communication.

In one school-based cluster site, the university supervisor spends two to three full days in the school which houses grades one through eight and provides full-time field experience for ten interns. Here, cooperating teachers meet once a week with the university supervisor and principal for problem-solving and support. Interns meet once a week with the supervisor. (This is true for all other sites as well.) Because of her regular presence in the school, the university supervisor is available for conferences as needed. She has become a part of the school team as witnessed by her involvement in curriculum development and in the school's move to a new physical facility. During a crisis period following the accidental death of a student while on a school-sponsored trip, the university supervisor assumed a counseling role along with other teachers in the school and professionals from the local community. The same

school sponsors retreats away from the building where cooperating teachers, interns, mentors, and the university supervisor come together to discuss school issues.

Regularly scheduled site-specific meetings between the university supervisor and the cooperating teachers are recommended Such meetings would be focused on educational issues (e.g. research updates and/or a continuing theme for mutual inquiry such as cooperative learning) as well as on support for individuals and their supervisory practices. Such meetings are currently rare despite the fact that substantive meetings of supervisors (Supe Group) and interns (weekly seminar led by supervisor) are institutionalized practices. Cooperating teachers sometimes participate in the intern seminars which are often held on site. Recommendations that cooperating teachers become involved in the seminars on a regular (e.g. monthly) basis have been opposed by many interns because they (the interns) are concerned that they might be uncomfortable about raising any problems regarding their relationships with cooperating teachers.

All sites have developed mechanisms by which the cooperating teacher and intern set aside specific times each week for formal communication and feedback rather than trying to "catch a few minutes here and there." Principals preferred an active role, hoping to meet with

all constituents on a regular basis, but definition of this role is still being explored.

One experienced cluster site reports that they are "meetinged out" at the beginning of the year while struggling to develop a workable schedule for all constituent groupings to attain needed support, communication, and growth.

Sharing of journal entries by cooperating teachers, interns, and supervisors is cited as an important means of communication, reflection, and setting of future direction. All interns are currently required to engage in written reflection. Depending upon the consensus at a particular site, some interns keep daily journals, some weekly, while others review their own implemented lesson plans, writing thoughts and suggestions directly on the plans. All entries are shared with the university supervisor, some are shared with cooperating teachers. Supervisors and cooperating teachers respond in writing. Shared written reflections from supervisor sand cooperating teachers is a new idea. Dialogues via electronic mail are being piloted at one site.

Category Three: Roles and Expectations of the Intern, Cooperating Teacher, School Administrator, and University Supervisor

The collaborative agrees that cooperating teachers must have taught three years or more in regular classroom and be educated in the theories

and practice of supervision. Currently, all cooperating teachers are experienced and are eligible for enrollment in a tuition-free, 4-credit graduate course entitled "Models of Supervision." Other, less formal arrangements between university supervisory faculty and schools have focused on education in supervisory techniques (Oja, 1988). The university pays larger stipends to cooperating teachers who have completed the Supervision course. All cooperating teachers receive tuition waivers and library and media privileges.

A major concern of all sites remuneration of interns. There is currently no equitable arrangement. All interns pay for 12 graduate credits of Internship. Many feel that the schools should be developing creative ways to pay interns and that the university should be developing creative ways to provide larger stipends to cooperating teachers. Some headway has been made on both fronts. One school is able to pay interns as novice teachers who participate in a funded state project. Two of the high schools pay interns to teach one or two classes from the first day while freeing the cooperating teacher during at least one of those class periods to observe and support the intern. Other schools pay interns for performing specific tasks such as curriculum development, technology integration, and substitute teaching.

Many sites acknowledge the intern as an important source for infusion of new ideas. Cooperating teachers find that they must be much more explicit about their goals for children and methods of assessing progress because they had to communicate these to the interns. This is both frustrating and rewarding. Schools feel responsible for treating the intern as a professional from the first day -- introducing him/her to other staff and children as a "teacher," and providing all orientation information normally provided to a new teacher at the school. For their part, interns are expected to do all of the work of teachers, including routine "duties." Expected performance of "duties" is another potential philosophical debate between the schools and the university who sometimes finds itself in the position of protecting an intern who has been asked to assume recess duty or to supervise study halls while the cooperating teacher develops lesson plans. On the other hand, cooperating teachers find it difficult to stand outside at recess day after day, looking through the window at the intern developing lesson plans. Interns, themselves, discover that recess and bus duty offer important learning experiences and help them integrate their role on a par with other school staff members. Unpaid interns follow the university calendar rather than that of the school, since they often have to work at a paying job during inter-semester break and in early summer. These issues are minor but must be negotiated successfully if the

attention of all collaborators is to be focused on the task at hand, teacher development.

Schools would like all supervisors to have had previous experience as cooperating teachers and special training in supervisory practices. Heavy reliance on adjunct supervisory faculty and availability of same precludes this as a requirement, although an effort is made to hire supervisors with these qualifications. Supe Group serves the dual role of socializing new supervisors and providing education in supervisory styles and practices.

When issues such as those described in the three categories above are raised in the spirit of collaborative airing and problem-solving, there is a predisposition for planning solutions that will work and may or may not be site specific.

In addition to the specific programmatic outcomes discussed in this paper which are centered around collaborative supervision, there have been a number of ongoing action research projects conducted jointly at the cluster sites by a university Supervisor/Researcher, Cooperating Teacher/Researcher, and Intern/Researcher. Current topics include alternative assessment, reading/writing process, cooperative learning, constructivist approaches to science teaching, and adult development.

DISCUSSION

In *Tomorrow's Schools*, the Holmes Group describes the process of inventing and starting a Professional Development School as one of design and negotiation, "a back-and-forth dialogue between people in a university and people in a school district, and between principles and actions" (*Executive Summary*, 1990). We believe that our School-University Collaborative in New Hampshire has begun the process of "Getting from here to there" (Principle 7 in the *Executive Summary, 1990)* as evidenced by changes in practice and modes of communication and inquiry designed to improve and democratize the education of children, teachers, pre-service teachers, and university faculty. The way in which the School-University Collaborative conducts its work reflects key elements in the collaborative process: *Teachers are involved in defining and solving problems. There is an emphasis on collaboration between school teachers and university professors.* The group has adopted a joint problem-solving approach encouraging explication of and reflection on practice. Research discussions center on real life problems aimed at changing and improving school and university practices. Tackling the problem of "ideal" matching of intern and cooperating teacher, for example, has resulted in several general and school-specific changes in practice as well as recommendations for the future. *The skills and insights of each*

participant are valued and utilized. A "work with" rather than a "work on" posture is assumed. Mutual goal-setting and support is an ethic of the group which is mirrored by the various methods of organizing supportive meetings for all constituents while inviting and valuing the input of each. A safe forum for voicing ideas and understanding differing perspectives is provided without compromising the integrity of each site or its personnel. Expertise and experience of various constituent groups and individuals is acknowledged, appreciated. We do not feel that we all have to have the same level of expertise or knowledge in a given area. All have taken on new or enhanced roles and are provided the support to do so. *The work of the collaborative is viewed by participants as a form of professional development.* The practice outcomes are illustrative: publication/presentation of documents and papers by cooperating teachers and interns; validation of roles, expectations, and process; joint investigation of a variety of teaching-related topics; formal recognition of the Collaborative by school and university administrators. *There is a moral-ethical dimension which challenges all participants to think in more encompassing ways.* We are no longer bound by our individual sites and foci, rather, we look forward to sharing and learning from each other in order to improve and be supported in our individual work. *The School/University Collaborative has become a temporary system which*

provides key facilitative conditions for the personal and professional development of team members. In the current study, such a temporary system of school and university personnel has come into being. Practice outcomes resulting from the process of collaboration continue to evolve. An initial "pie-in-the-sky" atmosphere frees collaborators to share their best ideas. Eventually, priorities are set, recommendations are acted upon, monitored, and become institutionalized forms of change.

We are always in flux, continually working to "get it right" without being overly prescriptive. We agonize over each idea or model we commit to paper, lest it be taken literally and never tailored or reworked. The inquiry continues. The nature of the inquiry changes, but teacher development and a collaborative approach are central. Sometimes we feel mired in a somewhat painful pursuit of excellence, but the growing pains have become familiar. We have begun to realize that it is the constant, not always comfortable, forward motion that sustains us and makes real things happen.

Bibliography

Andrew, M. D. (1989). Differences between graduates of 4-year and 5-year teacher preparation programs. Journal of Teacher Education, 41(2), 45-51.

Clift, R., Veal, J. L., Johnson, M. & Holland, P. (1989). Restructuring teacher education through collaborative action research. Journal of Teacher Education, 41(2), 52-62.

Corcoran, E., & Andrew, M. D. (1988). A full year internship: An example of school/ university collaboration. Journal of Teacher Education, 39(3), 17-35.

Cruickshank, D. R., & Cruz, J. (1989). Journal of Teacher Education, 40(3). May-June, 49-56.

Executive Summary (1990). Tomorrow's Schools: Principles for the Design of Professional Development Schools. A Report of the Holmes Group.

Johnson, W. R. (Winter, 1990). Inviting conversations: The Holmes group and tomorrow's schools. American Educational Research Journal. 27(4), 581-588.

Meister, G. (1990). Help for new teachers: Developmental practices that work. Research for Better Schools, 444 North Third Street,Philadelphia, PA 19123.

Oja, S. N. (1988). Program assessment report: A collaborative approach to leadership in supervision. Part B of the Final Report to the U. S. Department of Education, Office of Educational Research and Improvement. Durham, NH: University of New Hampshire Collaborative Research Projects.

Oja, S. N., Diller, A., Corcoran, E., & Andrew, M. D. (1991). Communities of inquiry, communities of support: The five-year teacher education program at the University of New Hampshire. In L. Valli, (Ed.). Reflective teacher education programs. New York: SUNY Press.

Oja, S. N., & Ham, M. C. (1988). Practice profile: A Collaborative approach to leadership in supervision. Part C of the Final Report to the U. S. Department of Education, Office of Educational Research and Improvement. Durham, NH: University of New Hampshire Collaborative Research Projects.

Oja, S. N., & Pine, G. J. (1987). Collaborative action research: Teachers' stages of development and school contexts. Peabody Journal of Education, 64(2), 96-115.

Oja, S. N., & Smulyan, L. (1989). Collaborative action research: A developmental approach. London: Falmer Press.

Tomorrow's schools. Principles for the design of professional development schools. (1990). A Report of the Holmes Group .